 Invited Workshop :   The Interface Problems and its Applications
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Invited Organizer: Yanping Lin
  (Applied Mathematics, HK Polytechnic University and University of Alberta)

May 26th

18:00--20:00 reception

May 27th

10:50--11:00   opening

[Session 1: Chair Yanping Lin]
11:00--11:30   Song Wang (University of Western Australia)
   "On Numerical Solution of Free Boundary Problems Arising From Option Valuation"

11:30--12:00   M. Lai (National Chiao Tung University)
   "A Front tracking method for motion by mean curvature with Surfactant"

12:00-12;30   D. Liang (York University)
    "Splitting domain decomposition methods for porous media flows over
    non-overlapping sub-domains and interfaces"

  (lunch)

[Session 2: Chair: S. Wang]
14:00--14:30   J. Li (University of Nevada Las Vegas and UCLA)
   "NumericalcConvergence and physical fidelity analysis for Maxwell's equations in
    metamaterials"

14:30--15:00   G. Fairweather (American Math Review and Colorado School of Mines)
   "An optimal quadratic spline collocation method for the biharmonic
    Dirichlet problem"

 (coffee break)

[Session 3: Chair J. Li]

15:30--16:00   Y. Di (Chinese Academy of Sciences)

   "A multi-mesh finite element method for interface problem simulation"

16:00--16:30 D. Kwak (Korea Advanced Institute of Sciences and Technology)

   "Optional convergence analysis of an immersed interface finite element method"

16:30--17:00   T. Lin (Virginia Tech)

   "IFE methods for solving interface problems on Cartesian meshes with local

refinement"

17:00--17:30   Yong CAO (Harbin Institute of Technology, Graduate School at Shenzhen)

"Ion Thruster Simulation using Immersed Finite Element Particle-In-Cell Method"

17:30--18:00   J. Deng (University of Alberta)
"Investigation of uncertainty in nonlinear aeroelastic systems"

May 28th

[Session 4: Chair D. Liang]
10:30--11:00   Z. Li (North Carolina State University)
"Immersed finite element methods for elliptic and elastic systems with interfaces and non-homogeneous jump condition"

11:00--11:30   D. Sheen (Seoul National University)
" On the fast linear solvers for Laplace transformation methods for
    parabolic problems"

11:30--12:00   N. Yan (Chinese Academy of Sciences)
"Adaptive anisotropic finite element mesh refinement for interface problems"

12:00--12:30   W. Cai (UNC Charlotte)
"A generalized discontinuous Galerkin(GDG) method for Schodinger equations with nonsmooth solution with application in optical waveguides"

  (lunch)

[Session 5: Chair Z. Li]
14:00--14:30   G. Bao (Michigan State University)
"A numerical verification method for solutions of nonlinear parabolic
  problems"

14:30--15:00   W. Wang (National Taiwan University)
"Interface and polynomial eigenvalue problems in quantum Dots simulation"

 (coffee break)

[Session 6: Chair G. Fairweather]
15:30--16:00   H. Wang (U South Carolina)
"An Eulerian-Lagrangian formulation for porous medium flow"

16:00--16:30 L. Cao (Chinese Academy of Sciences)
 "Computational Multiscale Modeling of Electromagnetics "

16:30--17:00 S. Zhang (Tianjin University of Finance and Economics)
"Superconvergence estimates of finite element methods for American option "

17:00-17:30 K.. Ito (North Carolina State University)

 "High order Finite Difference Schemes for Wave Equations in Inhomogeneous Media"

17:30-- closing remarks

19:00--21:00 Excursion (Harbour Cruise)

May 29th

10:30--17:00 open discussions

18:30--20:30 Banquet